

**REMARKS/ARGUMENTS**

This amendment is being filed in response to the Office Action dated May 5, 2011. Claims 1, 4-7, 10-12, 17, 20, 21, 24, 25, 27, and 31-40 are currently pending in the application, with Claims 1, 7, 17, and 21 being the independent claims. Claims 1, 7, 17, 20, 21, 27, 31, 32, 35 and 39 are amended herein. No new matter is added. For at least the following reasons, Applicants believe that this application is in condition for allowance and respectfully request that the case be passed to issue.

***Claim Rejections – 35 U.S.C. § 112***

Claims 1, 7, 17 and 21 are rejected under 35 U.S.C. § 112, first paragraph and second paragraph. Claims 21, 24, 36 and 40 are rejected under 35 U.S.C. § 112, second paragraph. The rejections are respectfully traversed, and reconsideration and withdrawal of the § 112 rejections are respectfully requested.

First with regard to the rejections of claims 1, 7, 17 and 21 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully disagree and submit that the text “and the hotkey keystrokes are prevented from being processed at the remote computing device” is supported within the specification. However, for the purpose of advancing the prosecution of the present claims, Applicants have amended claim 1 to recite: “the remote computing device is configured to ignore the hotkey keystrokes”. Support for this language may be found, for example, in paragraphs [0016]-[0017] and [0090] of the specification as published (U.S. Pat. App. Pub. No. 2005/0193104) reciting:

[0016] According to an additional preferred aspect of the invention, a keystroke management window is displayed, where the keystroke management window is user modifiable to accept a local keystroke management setting. If the local keystroke management setting is enabled, a keystroke is processed at the remote computing device, and if the local keystroke management setting is disabled, the keystroke is processed at the first local computing device.

[0017] By enabling the processing of keystrokes at a local computing device, the user can use hotkeys both remotely and locally to take advantage of time-saving shortcuts which were previously unavailable to users of thin client devices. For example, by configuring a remote computing device to ignore hotkeys remotely and transmit the hotkeys for processing at a local computer device, a user of the remote computing device can use the ALT-TAB hotkey to open multiple connections or applications executing at the local computing device or at multiple local computing devices, and switch between them with ease.

[0090] If the keystroke management setting is enabled, the hotkey keystroke is processed at a local computing device (step S330), and processing ends (step S303). Specifically, the improved user interface is instructed to ignore the hotkey keystroke, and therefore the keystroke is transmitted through the active connection for processing by the local computing device.

Next, with respect to the rejections of claims 1, 7, 17 and 21 under 35 U.S.C. § 112, second paragraph as failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention, Applicants respectfully submit that the limitation “a windows-type operating system” has been amended to recite “an operating system”.

Thus, Applicants respectfully submit that the rejections of claims 1, 7, 17 and 21, and dependent claims 4-6, 10-12, 20, 24-25, 27 and 31-40, under 35 U.S.C. 112, first paragraph and second paragraph, are overcome at least for the reasons described above. Accordingly, Applicants request that these rejections be withdrawn.

With respect to the rejections of claims 21, 24, 36 and 40 under 35 U.S.C. § 112, second paragraph, as failing to disclose the corresponding structure, material or acts for the claimed function, Applicants respectfully disagree and submit that the specification provides sufficient structures and acts for the claimed function. As an example, FIGS. 1, 2, 3 and the accompanying description provide various structures and acts for performing the claimed functions. More specifically, paragraphs [0044]-[0046] of the specification as published (U.S. Pat. App. Pub. No. 2005/0193104) recite exemplary structures and means for performing the means plus function steps recited in claims 21, 24, 36 and 40:

[0044] FIG. 2 is a detailed block diagram showing the internal architecture of computer 100. As shown in FIG. 2, the computing environment can include: central processing unit ("CPU") 200 where the computer instructions that comprise an operating system or an application, including the improved user interface, are processed; display interface 202 which provides communication interface and processing functions for rendering graphics, images, and texts on display monitor 102; keyboard interface 204 which provides a communication interface to keyboard 104; pointing device interface 205 which provides a communication interface to mouse 105 or an equivalent pointing device; printer interface 209 which provides a communication interface to hardcopy output device 109; random access memory ("RAM") 210 where computer instructions and data can be stored in a volatile memory device for processing by CPU 200; read-only memory ("ROM") 211 where invariant low-level systems code or data for basic system functions such as basic input and output (I/O), startup, or reception of keystrokes from keyboard 104 are stored in a non-volatile memory device; disk 220 which can comprise fixed disk drive 106 and removable disk drive 107, where the files that comprise operating system 230, application programs 240 (including improved user interface 242 and other applications 244) and data files 246 are stored; modem interface 214 which provides a communication interface to computer network 116 over a modem connection; and computer network interface 216 which provides a communication interface to computer network 116 over a computer network connection. The constituent devices and CPU 200 communicate with each other over computer bus 250.

[0045] RAM 210 interfaces with computer bus 250 so as to provide quick RAM storage to CPU 200 during execution of software programs such as the operating system application programs, and device drivers. More specifically, CPU 200 loads computer-executable process steps from fixed disk drive 106 or other memory media into a field of RAM 210 in order to execute software programs. Data, including data relating to the improved user interface, can be stored in RAM 210, where the data can be accessed by CPU 200 during execution.

[0046] Also shown in FIG. 2, disk 220 stores computer-executable code for a windowing operating system 230, application programs 240 such as word processing, spreadsheet, presentation, graphics, image processing, gaming, etc. applications. Disk 220 also stores the improved user interface for remote computing devices 242. The management of connections between a local computing device and a remote computer using an improved user interface is preferably implemented as shown, however it is also possible to implement the improved user interface for remote computing devices according to the invention as a dynamic link library ("DLL"), or as a plug-in to other application programs such as an Internet web-browser such as the Microsoft.RTM. Internet Explorer.RTM. web browser.

For the reasons described above, Applicants respectfully submit that the rejections of claims 21, 24, 36 and 40 under 35 U.S.C. § 112, second paragraph is overcome and should be withdrawn.

***Claim Rejections – 35 U.S.C. § 103***

Claims 1, 7, 17, 21, and 33-40 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Pat. No. 6,295,556 (“Falcon”), in view of U.S. Pat. App. Pub. No. 2004/0003371 (“Coulthard”), and further in view of U.S. Pat. App. Pub. No. 2004/0088377 (“Henriquez”), and further in view of U.S. Pat. App. Pub. No. 2002/0091850 (“Perholtz”). Claims 4, 10, 25, 27, and 31 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Falcon, in view of Coulthard, and further in view of Henriquez, and further in view of Perholtz, and further in view of U.S. Pat. No. 7,039,709 (“Beadle”). Claim 5 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Falcon, in view of Coulthard, and further in view of Henriquez, and further in view of Perholtz, and further in view of U.S. Pat. No. 7,181,524 (“Lele”). Claims 6, 12, 20, and 24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Falcon, in view of Coulthard, and further in view of Henriquez, and further in view of Perholtz, and further in view of U.S. Pat. App. Pub. No. 2004/0183831 (“Ritchy”). Claims 11 and 32 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Falcon, in view of Coulthard, and further in view of Henriquez, and further in view of Perholtz, and further in view of Beadle, and further in view of Lele. Applicants respectfully traverse these rejections and submit that the above-cited references, either alone or in combination, fail to describe or suggest each limitation as recited in the presently pending claims.

More specifically, with respect to claim 1, Applicants respectfully submit that the above-cited combination fails to describe or suggestion “wherein the desktop is operative to display at least a first application icon directly on the desktop at the remote computing device, ***wherein the first application icon represents an application available for execution on the first local***

**computing device.”** In rejecting claim 1, the Office Action relies on Coulthard as describing this limitation.<sup>1</sup>

Coulthard does not disclose, displaying at least a first application icon representing an application available for execution on the first local computing device. Instead, Coulthard describes “a common user interface ... displaying the connections objects, and underneath a list of the tools that can access the at least one remote system using that displayed connection object.”<sup>2</sup> Coulthard further discloses,

“ [A] framework for use with an integrated development environment, the framework comprising: a registry of at least one connection to at least one remote system, the at least one connection used by a plurality of tools in the integrated development environment to access the at least one remote system; and a common user interface shared by the plurality of tools, the common user interface capable of displaying the at least one connection and the plurality of tools and a context menu associated with each connection in the registry.”<sup>3</sup>

The tools described in Coulthard refer to “a software application that enables a software developer to write additional applications.”<sup>4</sup> The integrated development environment of Coulthard comprises software applications, i.e. tools, that access remote system through a connection associated with a connection object.<sup>5</sup> Thus, Coulthard’s tools cannot be equated with “an application available for execution on the first local computing device,” as recited in claim 1. Instead, the “remote accessing tools”<sup>6</sup> of Coulthard are specifically defined as residing within the integrated development environment ***executing on the processor of the computer processing device***, equated with the remote computing device recited claim 1 (not the local computing device), accessing one or more remote systems, equated with the local computing device recited

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<sup>1</sup> The Office Action, p. 9-10.

<sup>2</sup> Coulthard at para. [0047].

<sup>3</sup> Coulthard at para. [0046].

<sup>4</sup> Coulthard at para. [0003].

<sup>5</sup> Coulthard at para. [0048].

<sup>6</sup> Coulthard at para. [0099].

in claim 1.<sup>7</sup> Accordingly, Coulthard fails to describe or suggest “wherein the desktop is operative to display at least a first application icon directly on the desktop at the remote computing device, *wherein the first application icon represents an application available for execution on the first local computing device.*”

Furthermore, the above cited references either alone or in combination, fail to describe or suggest “a keystroke management window ... *wherein if the local keystroke management setting is disabled, all the hotkey keystrokes are processed at a first local computing device, and the remote computing device is configured to ignore the hotkey keystrokes at the remote computing device*”. The Office Action acknowledges that Falcon, Coulthard, and Henriquez do not disclose these features, and instead relies on Perholtz as disclosing these features.<sup>8</sup> Applicants respectfully traverse the forgoing contentions.

Perholtz does not disclose, among others, a local keystroke management setting where “if the local keystroke management setting is disabled, *all the hotkey keystrokes are processed at a first local computing device and the remote computing device is configured to ignore the hotkey keystrokes at the remote computing device,*” as recited in claim 1. Instead, Perholtz discusses a system that “permits a Remote PC to access and control a Host PC.”<sup>9</sup> More specifically, when “a Remote PC is placed in a Host mode, the Remote PC assumes control of the Host PC.”<sup>10</sup> However, Perholtz goes on to explain that when in Host mode “because the Remote keyboard, mouse and VDM act as if the remote user is sitting at the Host PC, *there needs to be a sequence and/or combination of keystrokes (i.e. hot key) pre-defined that will*

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<sup>7</sup> See Coulthard at para. [0050] (“... a **computer processing device**, comprising: **a processor** ... an integrated development environment **executing on the processor** ... tools within the integrated development environment may **access one or more remote systems**”) (emphasis added); The Office Action, p. 9.

<sup>8</sup> The Office Action, p. 12-14.

<sup>9</sup> Perholtz at para. [0022].

<sup>10</sup> Perholtz at para. [0288].

*cause the Remote PC to return back to a normal operating mode.”*<sup>11</sup> For example, “taps of the left or right shift keys presently cause the TVLINK.EXE program to pop up and activate TVLINK.EXE menu processing. In addition, when the ‘Print Screen’ key is pressed, TVLINK.EXE presently permits this keystroke to pass through to the Remote PC’s operating system, thereby permitting the *Remote PC* to print the contents of a Host PC’s VDM screen to a printer connected to the Remote PC.”<sup>12</sup>

Therefore, even in *Host mode*, the *Remote PC still processes hotkey keystrokes* such as those discussed in paragraph [0289] of Perholtz; thus, *all the hotkey keystrokes* are not processed *at the Host PC* and *ignored* at the *Remote PC*. As a result, Perholtz does not teach or suggest a “if the local keystroke management setting is disabled, *all the hotkey keystrokes are processed at a first local computing device and the remote computing device is configured to ignore the hotkey keystrokes at the remote computing device,*” as recited in amended claim 1. Instead, Perholtz specifically teaches away from this feature, because Perholtz specifically highlights the need for keystrokes predefined that will cause the Remote PC to return back to a normal mode and allowing the TVLINK.EXE to take other actions when necessary including for example when hotkeys such as “Print Screen” and other such processing exceptions.<sup>13</sup>

Similar arguments were presented in Applicants’ response to the previous Office Action (Amendment mailed February 25, 2011). The Office Action in response disagrees stating:

“First, the applicants cite the example of the “Print Screen” key in paragraph 0288 of Perholtz et al., which is not necessarily a hot key keystroke case. “Print Screen” is a single keyboard key. Second Perholtz et al. uses that an exception option that may or may not be implemented in all cases, but is available as an exception option. For all other

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<sup>11</sup> Perholtz at para. [0288].

<sup>12</sup> See Perholtz at para. [0289].

<sup>13</sup> See Perholtz at para. [0289].

hotkey keystroke options, the teachings of Perholtz et al. correspond to the claim elements recited in the independent claims 1, 7, 17 and 21.”<sup>14</sup>

Applicants submit that the claim limitation specifically recites, “if the local keystroke management setting is disabled, *all the hotkey keystrokes are processed at a first local computing device and the and the remote computing device is configured to ignore the hotkey keystrokes at the remote computing device.*” As the Office Action acknowledges Perholtz describes at least some hotkey keystrokes that are processed at the Remote PC. In fact, Perholtz specifically addresses that “*there needs to be* a sequence or combination of keystrokes (i.e. hot key)” that will be processed by the Remote PC even when in the Host mode.<sup>15</sup> Thus Applicants respectfully submit that Perholtz fails to teach or suggest “if the local keystroke management setting is disabled, *all the hotkey keystrokes are processed at a first local computing device and the remote computing device is configured to ignore the hotkey keystrokes at the remote computing device,*” as recited in claim 1.

Since Falcon, Coulthard, Henriquez, and Perholtz all do not teach or suggest what is recited claim 1 as discussed above, Applicants respectfully submit that claim 1 could not have been obvious under 35 U.S.C. § 103(a). Independent claims 7, 17, and 21 also recite limitations similar to those discussed above. As a result, Applicants submit that independent claims 7, 17, and 21 also could not have been obvious under 35 U.S.C. § 103(a). Reconsideration and withdrawal of the rejections of claims 1, 7, 17, and 21 are respectfully requested.

The other claims currently under consideration in the application are dependent from their respective independent claims discussed above and therefore are believed to be allowable over the applied references for at least similar reasons. Because each dependent claim is deemed

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<sup>14</sup> The Office Action, p. 59.

<sup>15</sup> Perholtz at para. [0288]-[0289].



to define an additional aspect of the invention, the individual consideration of each on its own merits is respectfully requested. Reconsideration and withdrawal of the rejections of the dependent claims are respectfully requested.

### **CONCLUSION**

The absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be other reasons that have not been expressed for patentability of any or all claims. Finally, nothing in this paper should be construed as an intent to concede, or actual concession of, any issue with regard to any claim, or to any cited art, except as specifically stated in this paper, and the amendment or cancellation of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment or cancellation.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience. Should the Examiner have any questions, please call the undersigned at the phone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 502624 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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